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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/228,658	01/12/99	PRINZING	H P17233

GREENBLUM & BERNSTEIM
1941 ROLAND CLARKE PLACE
RESTON VA 20191

IM22/0308

EXAMINER

WALLS, D

ART UNIT

PAPER NUMBER

1731

DATE MAILED:

03/08/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/228,658

Applicant(s)
Prinzling et al.

Examiner
Dionne A. Walls

Group Art Unit
1731



- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-33 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-33 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-24 and 26-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752,495.

Regarding claims 1, and 26-28, Bentele et al claims a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed

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“counter roll”) with a second support element having a respective second rotatable roll shell (corresponding to the claimed “roll jacket”) including a second fixed support (corresponding to the claimed “second non-rotating carrier”) around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed “deflection compensation roll”); a third roll; and a roll nip formed between the backing roll and the third roll.

Regarding claim 24, the backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed “counter roll....being cambered”).

Regarding claims 29-31, the roll press assembly having a second support element which is oriented so that the direction of action (corresponding to the claimed “action plane”) is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed “second support element of the counter roll coinciding with ...the at least one first support element”).

Regarding claims 2-3, 13-17, and 32-33, these claims differ from the press roll assembly claimed in Bentele et al because of language that recites first and second support elements being pressure fluid-actuated, said elements being connected to a common pressure fluid line; an adjustable pressure reduction device provided to change a pressure differential, said pressure reduction device including a variably adjustable valve; and pressure-active surfaces of one support element being “not equal” to second pressure active surfaces of the first support element of the shoe press unit. However, EP 752,495 discloses a shoe press device for treating a paper

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web having a shoe press roll comprising a first plurality of support elements, which press against a backing roll having a second plurality of support elements, the second support elements being smaller in size with reference to their pressure area on the shoe, and there is one or more rows of second pressure elements at each end of the shoe (corresponding to the claimed “pressure-active surfaces...being not-equal”). Both the first and second support elements, in each respective roll, are fed with pressurized hydraulic liquid (corresponding to the claimed “fluid actuated”) from a common pressure agent source. A pressure reduction valve (corresponding to the claimed “pressure reduction device/ variably adjustable valve”) can be provided such that different respective pressures may be applied to the first and second pluralities of support elements. (See col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure reduction valves, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45)

Lastly, regarding claims 4-12, and 18-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. The “changeable pressure differential” recitation of claims 1 and 13 are also process limitations. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure

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rather than function; and that “apparatus claims cover what a device *is*, not what a device *does*”.

(See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

3. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (U.S. Patent No. 5,788,817) in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or “crowning” of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being obvious over Bentele et al (US. Pat. No. 5,788,817) in view of EP 752,495.

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The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application of any unclaimed subject matter prior to the effective U.S. filing date of the reference under 37 CFR 1.131.

Regarding claims 1, and 26-28, Bentele et al shows a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll.

Regarding claim 24, the backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered").

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Regarding claims 29-31, the roll press assembly having a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element") (col. 6, lines 2-58; see fig. 1).

Regarding claims 2-3, 13-17, and 32-33, these claims differ from the press roll claimed in Bentele et al because of language that recites first and second support elements being pressure fluid-actuated, said elements being connected to a common pressure fluid line; an adjustable pressure reduction device provided to change a pressure differential, said pressure reduction device including a variably adjustable valve; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit. However, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising a first plurality of support elements, which presses against a backing roll having a second plurality of support elements, the second support elements being smaller in size with reference to their pressure area on the shoe, and there is one or more rows of second pressure elements at each end of the shoe (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the first and second support elements, in each respective roll, is fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. A pressure reduction valve (corresponding to the claimed

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“pressure reduction device/ variably adjustable valve”) can be provided such that different respective pressures may be applied to the first and second pluralities of support elements. (See col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of DE 195 20 443 by adding the adding the fluid-actuated support elements, pressure reduction valves, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45).

Lastly, regarding claims 4-12, and 18-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. The “changeable pressure differential” recitation of claims 1 and 13 are also process limitations. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that “apparatus claims cover what a device *is*, not what a device *does*”. (See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bentele et al (US. Pat. No. 5,788,817) in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, cambering of all

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press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or “crowning” of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

7. Claims 1-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 195 20 443 in view of EP 752,495.

Regarding claims 1, and 26-28, DE 195 20 443 shows a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed “shoe press unit”) with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed “press nip”), including a very flexible shell (corresponding to the claimed “flexible press belt/jacket”) and a fixed support (corresponding to the claimed “non-rotating carrier”) around which the first shell rotates; a backing roll (corresponding to the claimed “counter roll”) with a second support element having a respective second rotatable roll shell (corresponding to the claimed “roll jacket”) including a second fixed support (corresponding to the claimed “second non-rotating carrier”) around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed “deflection compensation roll”); a third roll; and a roll nip formed between the backing roll and the third roll.

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Regarding claims 2-3, 13-17, and 32-33, these claims differ from the press roll claimed in Bentele et al because of language that recites first and second support elements being pressure fluid-actuated, said elements being connected to a common pressure fluid line; an adjustable pressure reduction device provided to change a pressure differential, said pressure reduction device including a variably adjustable valve; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit. However, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising a first plurality of support elements, which presses against a backing roll having a second plurality of support elements, the second support elements being smaller in size with reference to their pressure area on the shoe, and there is one or more rows of second pressure elements at each end of the shoe (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the first and second support elements, in each respective roll, is fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. A pressure reduction valve (corresponding to the claimed

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8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 195 20 443 in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

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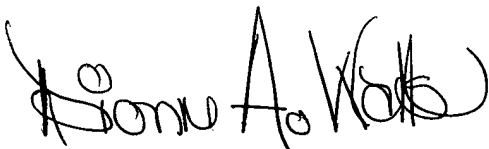
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rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dionne A. Walls whose telephone number is (703) 305 - 0933. The examiner can normally be reached Monday-Thursday from 6:30AM - 4:00PM (EST). The examiner can also be reached on alternate Fridays.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached at (703) 308-3837. Additionally, the fax number for this Group is (703) 305-7718.



Dionne A. Walls

March 6, 2000



Stanley S. Silverman
Supervisory Patent Examiner
Technology Center 1700